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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/506,644

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Dorothee Hoischen

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EXAMINER

KLINKEL, KORTNEY L

ART UNIT

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1611

MAIL DATE

DELIVERY MODE

11/05/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/506,644	Applicant(s) HOISCHEN ET AL.	
	Examiner Kortney L. Klinkel	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-50 is/are pending in the application.
- 4a) Of the above claim(s) 22-41, 43-47, 49 and 50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-21, 42 and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/4/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims

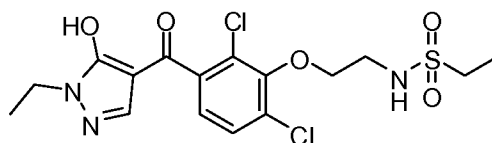
Claims 18-50 are pending in the instant Office action.

Election/Restriction

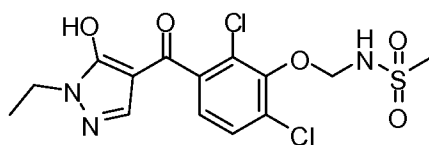
Applicant's election with traverse of Group I, claims 18-21, 42 and 48 in the reply filed on 9/10/2008 is acknowledged. The traversal is on the ground(s) that allowing all the claims to issue in the same case does not present an undue burden for examination. This is not found persuasive because the establishment of burden on the Office applies to US cases only. The instant application is a national stage entry of an international application under 35 U.S.C. 371. As a result, lack of unity practice is observed for restriction purposes. Along these lines, applicant argues that the special technical feature is not taught by the Van Almsick (US 6376429) referenced used by Examiner to break the unity. However, Van Almsick teaches a large variety of substituted aryl ketones, the -L-R1 chain of which generically encompasses the generically claimed A1-A2-N(R1)-A3 chain (formula (I), columns 1 and 2).

The requirement is still deemed proper and is therefore made FINAL.

Acknowledgement is also made of applicant's election of compound 2, of Table I on page 78 of the specification, shown below for clarity, which reads on elected Group I claims 18-21, 42 and 48.



As per MPEP 803.02, the Examiner will determine whether the entire scope of the claims is patentable. Applicants' elected species compound 2, of Table I on page 78 of the specification makes a contribution over the prior art. Therefore, according to MPEP 803.02: should the elected species appear allowable, the search of the Markush-type claim will be extended. If the search is extended and a non-elected species is not found allowable, the Markush-type claim shall be rejected and claimed to the nonelected invention held withdrawn from further consideration. The search of the Markush-type claim has been extended to include the products of the following formula, which differs slightly in the A1-A2-N(R1)A3-R2 chain from the elected species:



As a non-elected species has been found not allowable, the Markush-type claims have been rejected and claims to the nonelected invention held withdrawn from further consideration.

Claims 18-21, 42 and 48, have been examined to the extent to which they are readable on the elected embodiment, compound 2 on Specification page 78, and the above identified nonelected species. Since art was found on a nonelected species, subject matter not embraced by the elected embodiment or the above identified nonelected species is therefore withdrawn from further consideration. It has been determined that the entire scope claimed is not patentable.

Claims 22-41, 43-47, 49-50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected subject matter, there being no allowable generic or linking claim. Election was made with traverse in the reply filed on 9/10/2008.

Information Disclosure Statement

Acknowledgement is made of applicant's submitting an information disclosure statement on May 4, 2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement has been considered by the examiner.

Foreign Priority

Acknowledgement is made of applicant's foreign priority claim to German patent application serial number 10209645.7 filed March 5, 2002. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is

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requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18, 42 and 48 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18 recites that A² represents alkanediyl (alkylene), alkenediyl, or alkynediyl. It is unclear what is meant by “alkanediyl (alkylene)”. This phrase could mean alkanediyl substituted by an alkylene group, as parenthesis are often used to show substitution. Alternatively, the “(alkylene)” could simply be referring to alternative language for alkanediyl. However, if this is the case, it is unclear why alkenediyl and alkynediyl do not have similar alternative language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

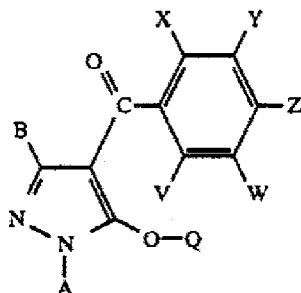
The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 18-21, 42 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oya et al. (US 4986845) in view of Morris et al. (WO 95/31446, as per Applicant's IDS).

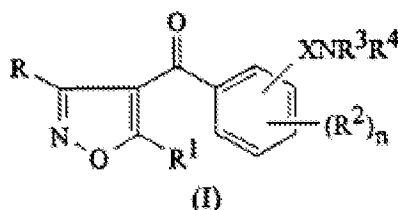
Oya teaches compounds of the following general structure and their utility as herbicides (abstract). For specific working examples, please refer to Tables 2-8, starting on columns 15-16. Data for these compounds of Table 2 can be found in Tables 9-11 beginning in column 84.



Oya also teaches that it has been known that 4-benzoylpyrazole derivatives have excellent herbicidal activities (column 7, lines 56-57). The compounds taught by Oya show excellent herbicidal activities against narrow and broad leaf weeds and no substantial phytotoxicity against useful plants such as crops (column 6, lines 65-68). Oya teaches various substituents for X, Y and Z which include Cl, SO₂Me, Me, OMe, CH₂OMe, inter alia, which are the same as the functionalities instantly claimed for instant X and Y. Additionally Oya's X, Y and Z can also be "larger" functionalities. These functionalities correspond to the instantly claimed -A1-A2-N(R1)A3-R2 chain. Examples of these "larger" functionalities include -OCH₂CH₂SO₂Me (compound 10, table 2), -OCH₂CH₂SMe (compound 9, table 2), -OCH₂CH₂OMe (compound 1, table 2), among several others including shorter chained ethers as well as 3- to 6-membered cyclic hetero- and non-hetero-systems. Oya also teaches the combination of the compounds with surfactants and extenders, see Formulation Examples 1-7 (columns 79-81).

The teachings of Oya differ from that of the instant invention, in that the -A1-A2-N(R1)A3-R2 chain differs. This shortcoming is overcome by the teachings of Morris.

Morris teaches herbicidal compounds of the following general structure (page 1).



The compounds of Morris show herbicidal activity against broad leaf and grass (i.e. narrow leaf) weeds (page 29, lines 11-13). Morris teaches various substituents for the benzyl ring including $-\text{CH}_2\text{N}(\text{Me})-\text{SO}_2\text{Me}$, which is the instantly claimed $-\text{A1-A2-N}(\text{R1})\text{A3-R2}$ chain when A1 is a bond, A2 is CH_2 , R1 is Me, A3 is SO_2 and R2 is Me. Morris' R2 represents halogen, straight and branched chain alkyl, alkenyl or alkynyl with 1-6 carbons, $-\text{SO}_2\text{R}$, $-\text{SOR}$, $-\text{SR}$, among others (page 1, line 32 to page 2, line 9). Morris also teaches that R and R1 represent a wide variety of functionalities, including hydrogen, alkyl and cycloalkyl groups, esters and carboxylic acids (page 1, lines 23-31). The compounds of Morris differ from those of the instant invention in the Z-group. Morris teaches the presence of a 5-membered isoxazole ring, whereas the instant claims require a 5-membered pyrazole ring—these rings differ structurally only in the 1-position. Morris also teaches that the compounds can be mixed with various extenders including water, and various oils and that the formulation can be in several different forms (page 33, lines 26-30).

As demonstrated by Oya, the substituted aryl ketone derivatives withstand a large degree of structural variation while still exhibiting herbicidal activity. Similarly, Morris teaches substituted aryl ketones which also withstand a large degree of structural variation while still exhibiting herbicidal activity. Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the instant invention to

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arrive at the instantly claimed compounds based upon the combined teachings of Oya and Morris, with a reasonable expectation that they too would function as herbicides. One would have been motivated to do so because the substituted aryl ketones taught by Oya and Morris are functional equivalents. The prior art compounds of Oya and Morris perform the identical function specified in the claim in substantially the same way, and produces substantially the same results as the corresponding element disclosed in the specification.

Applicant's data in the specification has been considered. Applicant has tested 4 compounds for herbicidal activity, namely Preparation Example compounds 2, 3,4 and 5. Compound 2 is the elected species. The experiments are outlined in Examples A and B, pages 158 and 159. Applicant states prophetically that the compound of Preparation Examples 2, 3, 4, and 5 exhibit strong activity against weeds, and some of them are tolerated well by crop plants such as, for example, maize and soya beans (Example A) and maize and wheat (Example B). However, the specification is bereft of any actual data for any of the compounds.

Conclusion

Claims 18-21, 42 and 48 are rejected are rejected. No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kortney Klinkel whose telephone number is (571)270-5239. The examiner can normally be reached on Monday-Friday 8am to 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached at (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KLK

/Sharmila Gollamudi Landau/

Supervisory Patent Examiner, Art Unit 1611